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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,388	08/19/2003	Robert L. Cushman	35799	3670

116 7590 04/02/2004

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EXAMINER


ZEC, FILIP

ART UNIT	PAPER NUMBER
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3744

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/643,388	Applicant(s) CUSHMAN ET AL.	
	Examiner Filip Zec	Art Unit 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 10-20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,125,641 to Kim et al. Kim discloses applicant's basic inventive concept, a refrigerator system comprising a cabinet (1, FIG. 4), having a compressor (abstract) and two compartments (3 and 4) connected via duct containing a damper (22 and 22a; 20) and separated by a wall (30), said damper controlled by a microprocessor receiving input from a door sensor detecting when the door is opened (S20 and S22; col 7, lines 20-25), substantially as claimed with the exception of disclosing the nature of the cycle used when determining the damper control. Kim uses temperature sensors to control the duration of the cycle based on the difference between the outdoor and indoor temperatures (col 5, 6 and 7). It, however, includes the detection of the door opening and incorporates into the damper control system, having it closed when the temperature rises due to the fresh air coming in from the outside enabling the ice melt and defrosting the damper. The time cycle is set which controls the compressor and the opening of the baffle, based on calculations for the temperatures of the chilling room (3) and the baffle (22) (col 6, lines 53-end and col 7, lines 1-24). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Kim, by

Art Unit: 3744

setting the specific number of cycles in order to conserve energy and improve quality of the product.

Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,125,641 to Kim et al., in view of U.S. Patent 6,055,820 to Jeong et al. Kim discloses applicant's basic inventive concept, a refrigerator system comprising a cabinet, having a compressor and two compartments connected via duct containing a damper and separated by a wall, said damper controlled by a microprocessor receiving input from a door sensor detecting when the door is opened, substantially as claimed with the exception of stating the use of a switch door sensor. Jeong shows this feature to be old in the refrigerating art (FIG. 7A-C), however using it for sensing the position of the baffle inside of the cabinet. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teaching of Jeong to modify the system of Kim, by using the switch detector for the door to improve the respond time of the control system.

Allowable Subject Matter

3. Claims 10-20 are allowed.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,622,504 to Lee, in Won et al.

U.S. Patent 6,694,758 to Cho, Seong-Ho et al.

U.S. Patent 5,711,159 to Whipple, Walter III

Art Unit: 3744

U.S. Patent 3,845,637 to Shepherd, Glen C.

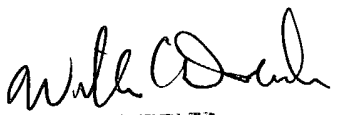
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Filip Zec whose telephone number is (703) 306-3446. The examiner can normally be reached on Monday through Friday, with the exception of every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Esquivel can be reached on (703) 308-2597. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Filip Zec
Examiner
Art Unit 3744

FZ


WILLIAM DOEHLER
PATENT EXAMINER
GROUP 3400